

ABSTRACT

The present invention relates to the use of methyl pyruvic acid (a methyl ester of pyruvic acid) and/or methyl pyruvate (methyl pyruvate is the ionized form of methyl pyruvic acid) for the purpose of treating diseases of the nervous system and/or to prevent against neuronal degeneration due to defective intracellular energy production. Methyl pyruvate compounds can be used as therapeutically effective agents against a variety of diseases of the nervous system such as diabetic and toxic neuropathies, peripheral nervous system diseases, Alzheimer disease, Parkinson's disease, stroke, Huntington's disease, amyotrophic lateral sclerosis, motor neuron disease, traumatic nerve injury, multiple sclerosis, dysmyelination, demyelination disorders, or cellular disorders which interfere with the energy metabolism of neurons and mitochondrial diseases. Use of methyl pyruvate and/or methyl pyruvic acid can be effective when administered orally or infused on either a chronic and/or acute basis. Treatment can be effective even when administered after the onset of an ischemic event that triggers neurodegeneration. In the following text, the terms "methyl pyruvate, methyl pyruvate compounds, methyl pyruvic acid" are used interchangeably.